Infographic: How to Best Connect to Public Cloud Services

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Initiatives: Cloud and Edge Infrastructure

There are an increasing array of options when connecting to public cloud resources, from “good enough” internet to newer software-defined connectivity services. This infographic aims to answer the question I&O leaders responsible for networking wrestle with: How do I best connect to the cloud?
How to Best Connect to Public Cloud Services

There are an increasing array of options when connecting to public cloud resources, ranging from “good enough” internet to newer software-defined connectivity services.

How should I connect to cloud?

Wait, why does it even matter?

Cloud adoption dramatically shifts network traffic flows

50% of enterprise workloads will be on a hyperscale platform by 2025

There's a plethora of options today ...
cloud providers and across multiple physical locations. Also provides end-to-end management, programmability via API and performance assurance.

**Cloud Hub**
A physical location offering basic connectivity to multiple cloud providers.

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### What are the differences between all these options?

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<th>Poor/Difficult</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Good/Easy</th>
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**Internet**

<table>
<thead>
<tr>
<th>Cloud Ecosystem</th>
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<th>Cloud Ports</th>
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<td>SDCI</td>
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<td>High Availability</td>
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<td>Cloud Hubs</td>
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<td>Initial Provisioning Time</td>
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<td>Ease of Performance Management</td>
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</table>

### Private Connections to Cloud Providers

- **Internet**
- **Cloud Ports**
  - e.g., AWS Direct Connect, Azure ExpressRoute, etc.
- **SDCI**
  - e.g., Megaport, AT&T, Unitas Global, PacketFabric, etc.
- **Cloud Hubs**
  - e.g., Equinix, Digital Realty, CoreSite, etc.

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### How do I choose?

Expect to use **both** internet and private WAN connections.

**The internet is **good enough for many cloud applications, but not all.**

**As more cloud services are used, the likelihood of needing private WAN services increases.**

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[Diagram showing Internet and Private WAN Services, connecting to a wide range of cloud providers.]
About This Research

Enterprise use of public cloud services will grow at a compound annual growth rate (CAGR) of more than 24% from 2021 through 2024 (see Forecast: Public Cloud Services, Worldwide, 2018-2024, 4Q20 Update). To support such rapid adoption, I&O leaders often must connect to cloud service providers (CSPs) quickly and on an unplanned basis, typically by adding incremental internet connections. This can result in suboptimal outcomes in the areas of cost, performance, security and management. This infographic answers the question “How should I connect my enterprise to the public cloud?”

Recommended by the Authors

How to Optimize Network Connectivity Into Public Cloud Providers

Innovation Insight for Software-Defined Cloud Interconnection

How to Architect Your WAN for Hybrid Cloud and Multicloud